

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claims 1 to 54 (Cancelled).

55 89. (Previously Presented) An end cap for a filter device comprising:  
a channel providing fluid communication from an exterior of the end cap to an interior chamber of the end cap, a portion of the channel adjacent to the interior chamber defining a fluid flow path in a first direction; and

at least one member extending from and located within the interior chamber of the end cap defining, for a fluid exiting the channel and flowing into the interior chamber of the end cap, a fluid flow path in a second direction different from the first direction.

56 90. (Currently Amended) The end cap of claim 55 89, wherein the filter device is a dialyzer.

57 91. (Currently Amended) The end cap of claim 56 90, wherein the end cap is attachable to a casing of the dialyzer.

58 92. (Currently Amended) The end cap of claim 55 89, wherein the channel is a blood inlet channel.

59 93. (Currently Amended) The end cap of claim 56 90, wherein the first direction is a direction that is non-radial relative to a direction defined by a hollow fiber bundle positionable in an interior chamber of the dialyzer.

60 94. (Currently Amended) The end cap of claim 59 93, wherein the first direction is a direction that is axial relative to the direction defined by a hollow fiber bundle positionable in an interior chamber of the dialyzer.

61 95. (Currently Amended) The end cap of claim 56 90, wherein the second direction is a direction that is radial relative to a direction defined by a hollow fiber bundle positionable in an interior chamber of the dialyzer.

62 96. (Currently Amended) The end cap of claim 55 89, wherein the at least one member is arranged circumferentially around the channel.

63 97. (Currently Amended) The end cap of claim 55 89, wherein the at least one member extends towards a perimeter of the interior chamber of the end cap.

64 98. (Currently Amended) The end cap of claim 55 89, wherein the at least one member is arranged such that the second direction of the fluid flow path defines an essentially radially symmetrical pattern.

65 99. (Currently Amended) The end cap of claim 55 89, wherein the at least one member is integrally formed with the end cap.

66 100. (Currently Amended) The end cap of claim 55 89, wherein the at least one member is curved.

67 101. (Currently Amended) The end cap of claim 55 89, wherein the end cap includes at least two members, respective portions of the members being spaced equidistantly relative to each other.

68 102. (Currently Amended) The end cap of claim 67 101, wherein the distance between respective portions of adjacent members decreases in the second direction of flow.

69 103. (Previously Presented) A filter device comprising:  
a casing for housing a filter element;  
an end cap attachable to the casing, the end cap including a channel providing fluid communication from an exterior of the end cap to an interior chamber of the end cap, a portion of the channel adjacent to the interior chamber defining a fluid flow path in a first direction, and at least one member extending from and

located within the interior chamber of the end cap defining, for a fluid exiting the channel and flowing into the interior chamber of the end cap, a fluid flow path in a second direction different from the first direction.

70 104. (Currently Amended) The filter device of claim 69 103, wherein the filter device is a dialyzer.

71 105. (Currently Amended) The filter device of claim 69 103, wherein the channel is a blood inlet channel.

72 106. (Currently Amended) The filter device of claim 70 104, wherein the filter element is a hollow fiber bundle.

73 107. (Currently Amended) The filter device of claim 72 106, wherein the first direction is a direction that is non-radial relative to a direction defined by the hollow fiber bundle when the hollow fiber bundle is located in an interior chamber of the dialyzer.

74 108. (Currently Amended) The filter device of claim 72 106, wherein the first direction is a direction that is axial relative to the direction defined by the hollow fiber bundle when the hollow fiber bundle is located in an interior chamber of the dialyzer.

75 109. (Currently Amended) The filter device of claim 72 106, wherein the second direction is a direction that is radial relative to a direction defined by the hollow fiber bundle when the hollow fiber bundle is located in an interior chamber of the dialyzer.

76 110. (Currently Amended) The filter device of claim 69 103, wherein the at least one member is arranged circumferentially around the channel.

77 111. (Currently Amended) The filter device of claim 69 103, wherein the at least one member extends towards a perimeter of the interior chamber of the end cap.

78 412. (Currently Amended) The filter device of claim 69 403, wherein the at least one member is arranged such that the second direction of the fluid flow path defines an essentially radially symmetrical pattern.

79 413. (Currently Amended) The filter device of claim 69 403, wherein the at least one member is integrally formed with the end cap.

80 414. (Currently Amended) The filter device of claim 69 403, wherein the at least one member is curved.

81 415. (Currently Amended) The filter device of claim 69 403, wherein the end cap includes at least two members, respective portions of the members being spaced equidistantly relative to each other.

82 416. (Currently Amended) The filter device of claim 81 415, wherein the distance between respective portions of adjacent members decreases in the second direction of flow.

83 417. (Previously Presented) An end cap for a filter device comprising:  
a channel providing fluid communication from an exterior of the end cap to an interior chamber of the end cap; and  
at least one member extending from and located within the interior chamber of the end cap, the at least one member configured to impart a circular motion to fluid exiting the channel and flowing into the interior chamber of the end cap.

84 418. (Currently Amended) The end cap of claim 83 417, wherein the filter device is a dialyzer.

85 419. (Currently Amended) The end cap of claim 84 418, wherein the end cap is attachable to a casing of the dialyzer.

86 420. (Currently Amended) The end cap of claim 83 417, wherein the channel is a blood inlet channel.

87 421. (Currently Amended) The end cap of claim 83 417, wherein a portion of the channel adjacent to the interior chamber defines a fluid flow path in a first direction.

88 422. (Currently Amended) The end cap of claim 84 418, wherein the first direction is a direction that is non-radial relative to a direction defined by a hollow fiber bundle positionable in an interior chamber of the dialyzer.

89 423. (Currently Amended) The end cap of claim 84 418, wherein the first direction is a direction that is axial relative to a direction defined by a hollow fiber bundle positionable in an interior chamber of the dialyzer.

90 424. (Currently Amended) The end cap of claim 83 417, wherein the at least one member is arranged circumferentially around the channel.

91 425. (Currently Amended) The end cap of claim 83 417, wherein the at least one member extends towards a perimeter of the interior chamber of the end cap.

92 426. (Currently Amended) The end cap of claim 83 417, wherein the at least one member is arranged such that the second direction of the fluid flow path defines an essentially radially symmetrical pattern.

93 427. (Currently Amended) The end cap of claim 83 417, wherein the at least one member is integrally formed with the end cap.

94 428. (Currently Amended) The end cap of claim 83 417, wherein the at least one member is curved.

95 429. (Currently Amended) The end cap of claim 83 417, wherein the end cap includes at least two members, respective portions of the members being spaced equidistantly relative to each other.

96 130. (Currently Amended) The end cap of claim 95 129, wherein the distance between respective portions of adjacent members decreases in the second direction of flow.

97 131. (Previously Presented) A filter device comprising:  
a casing for housing a filter element;  
an end cap attachable to the casing, the end cap including a channel providing fluid communication from an exterior of the end cap to an interior chamber of the end cap, the channel defining a fluid flow path in a first direction, and at least one member extending from and located within the interior chamber of the end cap, the at least one member configured to impart a circular motion to fluid exiting the channel and flowing into the interior chamber of the end cap.

98 132. (Currently Amended) The filter device of claim 97 131, wherein the filter device is a dialyzer.

99 133. (Currently Amended) The filter device of claim 97 131, wherein the channel is an inlet channel.

100 134. (Currently Amended) The filter device of claim 97 131, wherein the filter element is a hollow fiber bundle.

101 135. (Currently Amended) The filter device of claim 97 131, wherein a portion of the channel adjacent to the interior chamber defines a fluid flow path in a first direction.

102 136. (Currently Amended) The filter device of claim 101 135, wherein the first direction is a direction that is non-radial relative to a direction defined by a hollow fiber bundle positionable in an interior chamber of the dialyzer.

103 137. (Currently Amended) The filter device of claim 98 132, wherein the first direction is a direction that is axial relative to a direction defined by the hollow fiber bundle when the hollow fiber bundle is located in an interior chamber of the dialyzer.

104 138. (Currently Amended) The filter device of claim 97 134, wherein the at least one member is arranged circumferentially around the channel.

105 139. (Currently Amended) The filter device of claim 97 134, wherein the at least one member extends towards a perimeter of the interior chamber of the end cap.

106 140. (Currently Amended) The filter device of claim 97 134, wherein the at least one member is integrally formed with the end cap.

107 141. (Currently Amended) The filter device of claim 97 134, wherein the at least one member is curved.

108 142. (Currently Amended) The filter device of claim 97 134, wherein the end cap includes at least two members, respective portions of the members being spaced equidistantly relative to each other.

109 143. (Currently Amended) The filter device of claim 108 142, wherein the distance between respective portions of adjacent members decreases in the second direction of flow.

110 144. (Previously Presented) A hemodialyzer device comprising:  
a casing forming a housing, the casing having a blood outlet channel;  
a hollow fiber bundle stored within the casing;  
an end cap attachable to the casing, the end cap including a blood inlet channel providing fluid communication from an exterior of the end cap to an interior chamber of the end cap, the channel defining a fluid flow path in a first direction, and a plurality of curved members extending from and located within the interior chamber of the end cap, the at least one member defining, for a fluid exiting the channel and flowing into the interior chamber of the end cap, a fluid flow path in a second direction different from the first direction.

111 145. (Currently Amended) The hemodialyzer device of claim 110 144, wherein a portion of the channel adjacent to the interior chamber defines a fluid flow path in a first direction.

112 146. (Currently Amended) The hemodialyzer device of claim 111 145, wherein the first direction is a direction that is non-radial relative to the casing.

113 147. (Currently Amended) The hemodialyzer device of claim 112 146, wherein the first direction is a direction that is axial relative to the casing.

114 148. (Currently Amended) The hemodialyzer device of claim 110 144, wherein the second direction is a direction that is radial relative to the casing.

115 149. (Currently Amended) The hemodialyzer device of claim 110 144, wherein the plurality of members are arranged circumferentially around the channel.

116 150. (Currently Amended) The hemodialyzer device of claim 110 144, wherein the plurality of members extend towards a perimeter of the interior chamber of the end cap.

117 151. (Currently Amended) The hemodialyzer device of claim 110 144, wherein the plurality of members are arranged such that the second direction of the fluid flow path defines an essentially radially symmetrical pattern.

118 152. (Currently Amended) The hemodialyzer device of claim 110 144, wherein the plurality of members are integrally formed with the end cap.

119 153. (Currently Amended) The hemodialyzer device of claim 110 144, wherein respective portions of each one of the plurality of members are spaced equidistantly relative to each other.

120 154. (Currently Amended) The hemodialyzer device of claim 119 153, wherein the distance between respective portions of adjacent members decreases in the second direction of flow.

121 155. (Previously Presented) A method for filtering a fluid, comprising the steps of:

passing the fluid through a filter device, the filter device including a casing for housing a filter element and an end cap attachable to the casing, the end cap including a channel providing fluid communication from an exterior of the end cap to an interior chamber of the end cap, a portion of the channel adjacent to the interior chamber defining a fluid flow path in a first direction, and at least one member extending from and located within the interior chamber of the end cap defining, for a fluid exiting the channel and flowing into the interior chamber of the end cap, a fluid flow path in a second direction different from the first direction.

122 156. (Currently Amended) The method of claim 121 155, wherein the step of passing the fluid through the filter device involves passing blood through the filter device.

123 157. (Currently Amended) The method of claim 122 156, wherein the step of passing blood through the filter device involves passing blood through a dialyzer.

124 158. (Previously Presented) A method for filtering a fluid, comprising the steps of:

passing the fluid through a filter device, the filter device including a casing for housing a filter element and an end cap attachable to the casing, the end cap including a channel providing fluid communication from an exterior of the end cap to an interior chamber of the end cap, and at least one member within the interior chamber of the end cap, the at least one member configured to impart a circular motion to fluid exiting the channel and flowing into the interior chamber of the end cap.

125 159. (Currently Amended) The method of claim 124 158, wherein the step of passing the fluid through the filter device involves passing blood through the filter device.

126 160. (Currently Amended) The method of claim 125 159, wherein the step of passing blood through the filter device involves passing blood through a dialyzer.